# MICHIGAN DEPARTMENT OF CIVIL SERVICE JOB SPECIFICATION

# PHYSICIST SPECIALIST

## JOB DESCRIPTION

Employees in this job function as professional specialists with responsibility for a physicist program or specialty area; or as an administrative assistant to an administrator or executive. Positions are (1) designated as specialists by the Appointing Authority; (2) accepted and classified by Civil Service; (3) require advanced knowledge in the field of work; (4) responsible for highly complex assignments; (5) the scope of responsibility is significant; and (6) the job function has considerable impact within the department. Typically, positions in this job do not supervise.

There are two classifications in this job.

## Position Code Title - Physicist Specialist-2

## Physicist Specialist 13

The employee functions as a second-level specialist or as an administrative assistant to an office director, division director, or equivalent-level administrator.

# Position Code Title - Physicist Specialist-3

## Physicist Specialist 14

The employee functions as a third-level specialist or as an administrative assistant to a bureau director or equivalent-level executive.

First-level specialists are classified at the advanced level of the Physicist job.

### **JOB CONCEPTS**

Specialist jobs are evaluated by the appointing authority using the ECP Group Two Professional Specialist Position Evaluation Worksheet to recommend the appropriate classification level. Civil Service reviews the factors for job complexity, the scope of the program or specialty, and the impact of the job functions to determine the classification level. There are two types of specialist jobs:

<u>Program Specialist</u>: The predominant and essential function of the job is its assigned responsibility for an accepted program that is statewide, departmentwide, agencywide, or the equivalent scope. Such jobs are responsible for highly complex assignments that have considerable impact and are one-of-a-kind within the organization.

# PHYSICIST SPECIALIST

### PAGE No. 2

Staff Specialist: The predominant and essential function of the job is to serve as an expert in a particular specialty area or professional discipline that is statewide, departmentwide, agencywide, or the equivalent in scope. Such positions are responsible for highly complex assignments that have considerable impact and are one-of-a-kind within the organization.

Administrative Assistant jobs predominately and essentially function to advise and assist an administrator or executive in all areas for which the official is responsible. The positions report directly to the official in a staff capacity and are typically involved in budget development, program planning, policy and procedures development, representing the official at meetings, and are otherwise, assisting in all areas of the official's responsibilities.

## JOB DUTIES

**NOTE**: The job duties listed are typical examples of the work performed by positions in this job classification. Not all duties assigned to every position are included, nor is it expected that all positions will be assigned every duty.

## Administrative Assistant

Advises and assists the official in all areas of responsibility.

Carries out special projects as assigned by the official.

Assists in program planning, policy, and procedural development.

Participates in budget development.

Represents the official at meetings.

### Specialist

Recommends and formulates procedures, policies, and guidelines for assigned programs.

Develops and implements program goals and plans.

Makes recommendations in areas of expertise for the program.

Acts as a liaison with other agencies, organizations, and employees to coordinate technical programs.

Plans and coordinates the training of staff.

Serves as a technical consultant and liaison with industry and government agencies.

# PHYSICIST SPECIALIST PAGE No. 3

Conducts special projects.

Prepares special studies and reports.

Performs studies, examinations, and investigations of radiation uses in industry, medicine, educational institutions, and professional offices to determine compliance with radiation emissions.

Participates in conducting studies of x-ray installations to determine that x-ray machines meet regulations regarding radiation.

Participates in studies in laboratories and other facilities utilizing radioactive isotopes.

Calibrates and operates special instruments such as ionization radiation meters, neutron meters, and scintillation counters.

Participates in studies and procedures relating to licensing and registration.

Consults with professional and technical personnel on structural changes, shielding factors, and other engineering and scientific factors for facility construction and equipment use as it relates to radiation exposure of patients, occupational workers, and the public.

Coordinates decontamination procedures in case of radiological incidents.

Participates in the performance of colorimetric and photometric tests of materials and devices used for illumination, signing, traffic control, construction, and maintenance of highways and their appurtenances.

Participates in developing photometric and colorimetric methods to supplement or replace existing methods for testing or evaluating highway materials.

Participates in building instruments or test apparatus for the development of new methods of testing, or the modification of existing methods.

Operates and maintains photometric and colorimetric instruments, such as photometers, brightness meters, colorimeters, reflectometers, and spectro-photometers.

Reviews and abstracts technical literature related to the work.

Maintains records, and prepares reports and correspondence related to the work.

May perform related essential functions appropriate to the class and other non-essential functions as required.

# PHYSICIST SPECIALIST

### PAGE No. 4

# **JOB QUALIFICATIONS**

# Knowledge, Skills, and Abilities

**NOTE:** The degree of knowledge required is a function of job complexity,

program or specialty scope, and impact, which increases with the level

of the position.

# **Administrative Assistant**

Knowledge of the principles and techniques of administrative management; including, organization, planning, staffing, training, budgeting and reporting.

Knowledge of fiscal planning, budgeting, and management.

## Specialist

Knowledge of the operational and technical problems involved in the administration of a specialized program.

Knowledge of the assigned program specialty.

## Administrative Assistant and Specialist

Knowledge of methods of planning, developing, and administering programs.

Knowledge of state and federal laws and legislative processes related to the work.

Knowledge of reporting methods and techniques.

Ability to plan, direct, and coordinate program and administrative activities of a complex, interrelated, and interdependent nature where unknowns and numerous contingency factors are involved.

Ability to formulate policies and procedures relevant to program areas based on information of a conceptual nature from varied and complex sources.

Ability to plan, coordinate, and expedite work projects.

Ability to interpret complex rules and regulations.

Ability to communicate with others verbally and in writing.

Knowledge of the principles of physics, including such areas as light, optics, electricity and electrical measures.

Knowledge of mathematics and the principles of chemistry.

Knowledge of atomic and nuclear physics.

## PHYSICIST SPECIALIST

### PAGE No. 5

Knowledge of radiation measuring devices.

Knowledge of current literature in the field.

Knowledge of laboratory equipment and techniques used in physical, psychophysical, and radiocounting measurement.

Ability to set up and use laboratory equipment.

Ability to meet and discuss technical matters with professional persons.

Ability to assist in the development of new equipment and methods.

Ability to maintain records, and prepare reports and correspondence.

Ability to communicate with others effectively.

Ability to maintain favorable public relations.

## **Working Conditions**

Some jobs require an employee to risk sustaining illness and injury from the exposure to radioactive materials or contamination.

## **Physical Requirements**

None.

### **Education**

Possession of a bachelor's degree in physics.

### **Experience**

## Physicist Specialist 13

Four years of experience as a physicist, including two years of experience equivalent to a Physicist P 11.

<u>OR</u>

One year of experience equivalent to a Physicist 12.

### Physicist Specialist 14

Five years of experience as a physicist, including three years of experience equivalent to a Physicist P 11.

# PHYSICIST SPECIALIST PAGE No. 6

Two years of experience equivalent to a Physicist 12.

<u>OR</u>

One year of experience equivalent to a Physicist Specialist 13.

# Special Requirements, Licenses, and Certifications

None.

**NOTE:** Equivalent combinations of education and experience that provide

the required knowledge, skills, and abilities will be evaluated on an

individual basis.

# JOB CODE, POSITION TITLES AND CODES, AND COMPENSATION INFORMATION

Job CodeJob Code DescriptionPHYSICSPLPhysicist Specialist

Position Title Position Code Pay Schedule

Physicist Specialist-2 PHYSPL2 H21-033 Physicist Specialist 3 PHYSPL3 H21-034

ECP Group 2 Revised 5/22/02 MJP/VLWT/Team Leaders